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MAY. 30. 2006 5:54PM (3) FISH & RICHARDSON 6175428906 NO. 0663 P. 1

Attorney's Docket No.: 00614-143001

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Applicant : Patrizio Vinciarelli  
Serial No. : 10/723,768  
Filed : November 26, 2003

Art Unit : 2832  
Examiner : Nguyen, Tuyen T

Title : Printed Circuit Transformer

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Attached to this facsimile communication cover sheet is Response to Restriction Requirement, faxed this 30 day of May, 2006, to the United States Patent and Trademark Office.

Respectfully submitted,

  
\_\_\_\_\_  
David L. Feigenbaum  
Reg. No. 30,378

Date: May 30, 2006

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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 Filed : November 26, 2003  
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Mail Stop Amendment  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT OF MAY 15, 2006

The May 15<sup>th</sup> restriction contains a few inaccuracies in dividing the species as follows:

- Embodiment 1: figures 1-5;
- Embodiment 2: figures 6-21;
- Embodiment 3: figure 22; and
- Embodiment 4: figure 23.

First, figures 1 and 2 respectively show a SAC converter and prior art transformer (see specification, p. 1, lines 7-8; p. 2, line 10) which applicant assumes should not be included with Embodiment 1, figures 3-5, which show a generalized version of the claimed transformer (pp. 6-8).

Embodiment 2 correctly includes figures 6-8 (showing a variation of the generalized transformer of figures 3-5, which "may be readily scaled to accommodate a wide variety of turns ratios and applications while retaining its desirable features" (p. 8, lines 4-6). Figures 9-21 show a more specific example of the transformer of figures 6-8: "Figures 9 through 21 show thirteen etch layers of a printed circuit board comprising primary and secondary windings that form part of a transformer. The printed circuit board is designed for use with four sets of core pairs of the

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Page : 2 of 2

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kind shown in Figure 6 ..." (p. 9, lines 8-11). The restriction mistakenly separates figures 22 and 23 from each other and from figures 9-21. Figures 22 and 23 are schematics for the specific example of figures 9-21 and therefore may not be divided readily as separate species:

"A schematic of the connections between all of the thirty-two secondary windings (two each of secondaries 70 – 85) of Figures 9 through 21, along with their corresponding pad locations, via interconnection designators and synchronous rectifiers (shown as diodes 100a – 100h), is shown in Figure 22" (p. 10, lines 6-10 (emphasis added))

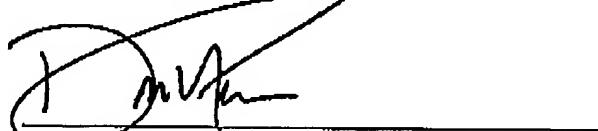
"A schematic of the connections between the four primary windings (86 - 89) of Figures 10, 13, 16 and 19, along with their corresponding pad locations, via interconnection designators and resonant capacitors (marked CR1 and CR2 in the Figure), is shown in Figure 23" (p. 10, lines 27-30 (emphasis added)).

The applicant therefore understands that the May 15<sup>th</sup> Restriction intended to divide the application into a first embodiment including figures 3-5 and a second embodiment including figures 6-23.

The applicant elects the second embodiment and specifically the species of figures 9-23. Currently all claims read upon this embodiment. This election is made without traverse.

Please apply any charges or credits to Deposit Account No. 06-1050 referencing attorney docket 00614-143001.

Respectfully submitted,



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Date: 5/30/06

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